EXHIBIT 139

Authorized Buyers overview

Discover the basics of Authorized Buyers

An ad exchange is an online, auction-driven marketplace where ad impressions are bought and sold in real time. Just like ad networks and yield managers, an ad exchange connects buyers with publishers looking to sell their ad inventory.

Authorized Buyers have access to a real-time marketplace that helps buyers, such as ad networks, agency holding companies, and demand-side platforms maximize return on investment (ROI) across millions of seller sites.

Buyers can increase ROI through targeting, defined bids, defined budgets and frequency caps on inventory purchases. A real-time bidding system can let buyers use their proprietary data (for example, user data) and bidding technology for even more control over media spend.

The sell side of the marketplace and inventory pool is for sellers to provide supply, and the buy side is for buyers to provide demand.

See more details about the auction model in the publisher products Ad Manager   , AdMob   , and AdSense to learn how ads are selected and how winning bids are determined.

Authorized Buyers

Buyers who act as an ad network, trading desk, or demand-side platform can buy inventory. These companies must buy on behalf of multiple advertisers.

The most common buyers:

- **Ad networks**: companies that aggregate publisher ad space and sell it to advertisers opting to advertise in the space.
- **Trading desks**: divisions at agency holding companies that execute exchange buys for all the company's agencies.
- **Demand-side platforms** (DSP): platforms that make buying across multiple exchanges easier and more transparent. Using sophisticated targeting capabilities and optimization algorithms, DSPs help advertisers and agencies to determine a value of an incoming impression and to place a bid in order to win that impression.

Authorized Buyers can buy inventory for advertisers through real-time bidding.

Real-time bidding (RTB)

Using real-time bidding, buyers build their own system called a real-time bidder that connects to Google servers to get a constant stream of "callouts" or bid requests.

For example, when an impression becomes available on a seller's site, Authorized Buyers sends information to all real-time bidders with information about the impression and user. The real-time bidder analyzes it, selects an advertiser from the buyer's base of clients, and then responds with an ad creative and bid for that advertiser. Or, if they do not wish to bid, they can place an empty bid. The bid is then entered alongside all other bids in the auction. This all happens within 100 milliseconds, or in real time.

Learn more about the buyer API

Learn more about real-time bidding and how to access and buy impressions using an API.

Need more help?
Try these next steps:

Contact us
Tell us more and we'll help you get there